Author's response to reviews

Title: In Vitro Effects of Imatinib Mesylate on Radiosensitivity and Chemosensitivity of Breast Cancer Cells

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Author's response to reviews: see over
M. T. Weigel et al.: “Effects of Imatinib Mesylate on Radiosensitivity and
Chemosensitivity of Breast Cancer Cell Lines”

Dear Ladies and Gentlemen,

We are pleased to have the opportunity to submit the revised version of the above-
mentioned manuscript for consideration for publication in BMC Cancer.
We would like to kindly thank the reviewers for their constructive comments on our
manuscript and we made an effort to amend every mentioned point of critique.

The ethic committee of the University of Kiel has approved the research reported in this
manuscript (AZ D 426/10).

We followed the reviewer’s advice and included images of TUNEL staining and colony
formation in the figures. Moreover, we repeated western blots or replaced overexposed
blots with shorter exposures to increase the quality of the images as suggested by both
reviewers. Loading controls are provided for every blot.

In an additional experiment, we tested the effect of imatinib on cell migration in both
breast cancer cell lines in the presence and absence of PDGF as recommended by the
reviewer. Results and images have been included in the manuscript.

The statistical analysis used for figures 1-3 has been the Student’s t-test to determine
statistically relevant differences. P-values<0.05 have been marked with a symbol in the
revised versions of the figures. Furthermore, to identify the effect of the drug combination
on cell proliferation, the combinatory index was calculated using Calcusyn software.
Corresponding results have been displayed in form of a table.

The effect of a combination of radiation with imatinib in breast cancer cell lines and the
subsequent determination of the survival fraction is the basis for former figure 4(now 5).
This experiment has been set up in triplicates and was repeated twice as stated in the
manuscript. In the mean time the experiment has been repeated in order to decrease
standard deviations.
All experiments described in this manuscript have been performed at least in triplicates and have been repeated for three or more times to validate results.

We hope that we could answer the reviewers’ comments and suggestions for improvement of our manuscript “Effects of Imatinib Mesylate on Radiosensitivity and Chemosensitivity of Breast Cancer Cell Lines” satisfactorily.

We confirm that all authors fulfill all conditions required for authorship. We also confirm that there is no potential conflict of interest or financial dependence regarding this publication, as described in the Instruction for Authors. All authors have read and approved the manuscript. This manuscript has not been published before and has not been submitted to any other journal.

We hope that the revised version of our original article is suitable for publication in “BMC Cancer”.

Yours sincerely,

M.T. Weigel, MD